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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,645	10/14/2003	John Trankina	7967/83952	3212
24628 7	590 01/19/2006		EXAM	IINER
WELSH & KATZ, LTD			TRAN, CHUC	
120 S RIVERS	SIDE PLAZA			
22ND FLOOR			ART UNIT	PAPER NUMBER
CHICAGO, IL 60606			2821	

Please find below and/or attached an Office communication concerning this application or proceeding.

		EK				
	Application No.	Applicant(s)				
Office Action Summer.	10/684,645	TRANKINA, JOHN				
Office Action Summary	Examiner	Art Unit				
· · · · · · · · · · · · · · · · · · ·	Chuc D. Tran	2821				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
<ol> <li>Responsive to communication(s) filed on <u>14 November 2005</u>.</li> <li>This action is FINAL. 2b) This action is non-final.</li> <li>Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213.</li> </ol>						
Disposition of Claims						
4) ☐ Claim(s) 1-3,5,6,9-22 and 28-34 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) 13-22 and 29-31 is/are allowed.  6) ☐ Claim(s) 1-3,5-12,28,32 and 33 is/are rejected.  7) ☐ Claim(s) 34 is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction of the output of	epted or b) objected to by the Eddrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). sected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
		TANHO				
		PRIMARY EXAMINER				
Attachment(s)						
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	(PTO-413) Ite atent Application (PTO-152)				

### **DETAILED ACTION**

#### Remarks

This is a response to the Applicant's amendment submitted on November 14, 2005. In virtue of the amendment, claims 4, 7-8 and 23-27 are cancelled, and new claims 28-34 are added; thus, claims 1-3,5-6,9-22 and 28-34 are remaining active in the instant application.

### Response to Arguments

1. Applicant's arguments with respect to claims 1-3, 5-6, 9-22 and 28-34 have been considered but are most in view of the new ground(s) of rejection.

Applicant argues that the prior art does not disclose or suggest attaching a spacer element to the antenna tower by welding. The prior art Svensson Fig. 2 clearly teaches attaching a spacer element (2) to the antenna tower by welding (Svensson, Col. 1, Line 45).

### Claim Rejections - 35 USC § 102

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-3, 5, and 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Svensson (USP. 3,987,593).

Regarding claim 1, and 9-10 Svensson disclose a conventional antenna tower reinforcement in Fig. 1-4 comprising:

- a plurality of spacer elements (2) attached to the tower (Fig. 3);
- at least one stiffening member (1) spaced equally apart about the circumference of the tower (Fig. 2) and attached to at least two of the plurality of spacer elements (2) (Fig. 3) such that the stiffening member reinforces the tower (Col. 1, Line 18); wherein

Art Unit: 2821

- at least one of the plurality of spacer elements (2) is attached to the tower by welding (Col. 1, Line 45).

Regarding claims 2-3 and 5, Svensson disclose that wherein the stiffening member (1) and the spacer (2) are structural steel elements (Col. 1, Line 48).

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silber (US 2005/0166521).

Regarding claims 32 and 33, Silber disclose an antenna tower reinforcement comprising:

- at least one stiffening member (16) attached to the antenna tower (Fig. 3) such that the stiffening member reinforces the tower (Page 2, Col. 1, Line 21); a shell (44) attached to the stiffening member (16) (Fig. 4); the Shell (12) having a larger cross-section than the antenna tower (14) at any height of the shell (Fig. 1). However, Silber does not disclose the shell having a cross-sectional shape similar to that of the antenna tower. Thus, it would have been obvious to one of ordinary skill in the art to recognize the cross-sectional shape of the antenna tower similar to that of the shell. The ordinary artisan would have been motivated to modify Silber in the manner described above for being internal secured to and supported by the metal structure (See Abstract).

Regarding claim 33, Silber disclose in Fig. 9 that a plurality spacer (107, 108)

Application/Control Number: 10/684,645

Art Unit: 2821

attached to the antenna tower (105); wherein

- at least one stiffening member (16) attached to the plurality of spacer elements (107, 108) Fig. 9).
- 5. Claims 6 and 11-12 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Svensson (USP. 3,987,593).

Regarding claim 6, Svensson disclose a conventional antenna tower reinforcement as set forth in the claims except at least one stiffening member height less than the height of the antenna tower. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to recognize the height of the outer shell and the stiffening member are shorter more than the inner shell (tower) in order to have more space to mount the conventional antenna or street light. It's matter of obvious of design choice.

Regarding claims 11 and 12, Svensson disclose a conventional antenna tower reinforcement as set forth in the claims except the stiffening member is a structure element comprising one or more structural plate attached to the spacer and welded together. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to recognize Svesson by welding or attaching one or more steel plates to the stiffening member and welded together to spacers. The ordinary artisan would have been motivated to modify Svensson in the manner described above for strength the pole and resistance to deformation (See Svensson, Col. 1, Line 12). It's matter of obvious of design choice.

Regarding claim 28, Svensson disclose a conventional antenna tower reinforcement as set forth in the claims except the stiffening member comprises a steel plates joined together into a generally "Z" shaped member. Thus, it would have been obvious to one of ordinary skill in the

Application/Control Number: 10/684,645 Page 5

Art Unit: 2821

art at the time the invention was made to recognize Svensson by changing the stiffening member (1) into a generally "Z" shaped member. The ordinary artisan would have been motivated to modify Svensson in the manner described above for strength the pole and resistance to deformation (See Svensson, Col. 1, Line 12). It's matter of obvious of design choice.

### Allowable Subject Matter

- 6. Claims 13-22, and 29-31 are allowed.
- 7. The following is an examiner's statement of reasons for allowance:

Regarding claims 13, the references of the prior art of record fails to teach or suggest the combination of the limitations as set forth in the claim: a light weight shell having a cross-sectional shape similar to that of an antenna tower; a plurality of spacers attached to the tower; at least one stiffening member distributed between the shell and the antenna tower; wherein the stiffening member attached to the at least two of the plurality of spacers and the shell.

Regarding claims 14-22 are allowable for the reasons given above because of their dependency status from the claim 13.

Regarding claim 29, the references of the prior art of record fails to teach or suggest the combination of the limitations as set forth in the claim: the stiffening member comprising first, second and third plate section; the first and second plate sections being generally parallel; wherein the first and second plate sections being joined to the third plate section so as to form a "Z" shaped cross-section.

Regarding claims 30 and 31 are allowable for the reasons given above because of their dependency status from the claim 29.

Art Unit: 2821

8. Claim 34 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### Citation of relevant prior art

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Application/Control Number: 10/684,645

Art Unit: 2821

Prior art Casaly (USP. 4,571,804) disclose utility pole.

Prior art Brunozzi et al (USP. 6,901,717) disclose pole reinforcing arrangement.

### Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuc D. Tran whose telephone number is (571) 272-1829. The examiner can normally be reached on M-F Flex hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TC

January 13, 2006

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Page 7

TAN HO
PRIMARY EXAMINER